

REMARKS

Claims 1-3, 5 and 12-14 are all pending in the present application.

Applicants have provided the attached drawings to distinguish the rejected claims from WO 96/07941 A1 as part of Applicants' Response under 37 C.F.R. § 1.116. The drawings have been attached. Please note that these drawings are not amended drawing under 37 C.F.R. § 1.116.

I. Paragraph 2 - Examiner's Response to Arguments (35 U.S.C. § 102(b))

The Examiner has maintained the rejections of Claims 1-3, 5 and 12-14 under 35 U.S.C. § 102(b) as allegedly being anticipated by WO 96/07941 (hereinafter referred to as "Andreatta") for the reasons set forth in Section 4 of the Office Action dated March 22, 2006. The Examiner asserted that "the ensemble of molecules of the dye disclosed in Andreatta clearly align with the rubbing direction in the alignment layer." (See, Action of 12/19/06 at p. 2, ¶ 2). According to the Examiner, "Andreatta does not explicitly disclose that the *individual planar or tubular shape of each molecule* in the ensemble of molecules are oriented roughly perpendicular to the rubbing direction." (Id.). According to the Examiner, the orientation of the dye in relationship to the rubbing direction is an inherent feature. The Examiner relied on U.S. 6,563,640 B1 (hereinafter referred to as "Ignatov et al.") as extrinsic evidence to show the alleged inherency of the orientation of dye in relation to the rubbing direction.

Applicants' Response:

The rejection should be withdrawn because Andreatta discloses dye that is oriented parallel to the rubbing direction, and therefore does not teach every limitation recited in Claim 1. A claim is anticipated under 35 U.S.C. § 102 (b) only if the reference teaches every element of the claim either expressly or inherently. (M.P.E.P. § 2131). The present claimed invention is directed to a polarizing plate comprising a polarizing layer having a thickness of about 20 nm to about 1500 nm formed by rubbing at least one surface of a substrate, coating the rubbed surface of the substrate with an aqueous solution containing a dye having a tabular molecular shape, and drying the solution, wherein the dye having a tabular molecular shape coated on the rubbed surface of the substrate is oriented roughly perpendicular to the rubbing direction. Andreatta does not disclose a polarizing plate comprising a polarizing layer wherein the rubbed surface of the substrate contains a tabular molecular dye wherein the dye is oriented on the substrate roughly perpendicular to the rubbing direction. According to Examples 1-3 and Figures 3-5 disclosed in Andreatta, the dye is oriented parallel to the rubbing direction of the polytrifluoroethylene (PTFE). Figures 3-5 show that the absorption intensity of a polarized light in a direction parallel to an alignment of dye-containing film is greater than that in a direction perpendicular to the alignment of dye-containing film. Thus, it is apparent that the dye is oriented parallel to the rubbing direction.

Furthermore, Andreatta does not disclose the claimed range with sufficient specificity to render the claim anticipated. When prior art discloses a range which touches or overlaps the

claimed range, but no specific examples falling within the claimed range are disclosed, determination of anticipation is made on a case by case basis. (See, M.P.E.P. § 2131.03 (II)). Andreatta discloses dye-containing film wherein the thickness of the dye-containing film typically falls between about 1 nanometer and 5,000 nanometers. (Andreatta at p. 3, lines 4-5, see also, p. 23, lines 28-29). Andreatta discloses preferred ranges of 5 nm to 1,000 nm, 10 nm to 1,000 nm and 10 nm to 500 nm. (See, Andreatta at p. 23, lines 28-30). Claim 1 in the present application recites in relative terms “A polarizing plate comprising a polarizing layer having a thickness of about 20 nm to 1,500 nm.” The range described in Andreatta does not describe the claimed range of 20 nm to 1,500 nm with specificity to be anticipatory and therefore the rejection should be withdrawn.

The Examiner has relied on Ignatov et al. as extrinsic evidence to prove that dye oriented in roughly perpendicular to the rubbing direction is an inherent trait.

Applicants respectfully traverse on the following grounds.

First, Applicants disagree with the Examiner’s characterization of Ignatov et al. Ignatov et al. discloses dichroic polarizer film consisting of a crystalline structure that comprises at least one dichroic organic substance, wherein the molecules or molecule fragments of the substance have a planar morphology. With respect to orientation, Ignatov et al. discloses mechanical orientation of LC solutions of the organic substance performed on the substrate surface and subsequent drying under the conditions causing ordered crystallization of the organic substance. (Ignatov et al., col. 7, lines 64-67). Further, “the highly ordered linear ensembles, in which the

organic-substance molecule planes are approximately perpendicular to the ensemble axis, are the structural units of such LC solutions." (Id. at col. 8, lines 28-41). Ignatov et al. therefore discloses that the dye lies in planes that are perpendicular to the substrate (crystalline-ordered thin organic substance) to incorporate the organic substance in the crystalline lattice. Ignatov et al. does not teach perpendicular orientation of the dye on the substrate relative to the rubbing direction.

Second, Ignatov et al. does not provide evidence of inherency with respect to the orientation of dye and the rubbing directions. "The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic." (See, M.P.E.P. § 2112 (IV)). Extrinsic evidence must clearly show "that the missing descriptive matter is necessarily present in the thing described in the reference" (Id.). According to the Examiner, the alleged missing descriptive matter which is not described in Andreatta is the "individual planar or tabular shape of each molecule in the ensemble of molecules" that are oriented roughly perpendicular to the rubbing direction. (Sec. Action on 12/19/2006 at p. 2, lines 10-15). Ignatov et al. does not disclose rubbing treatment, namely that the dye is oriented perpendicular to the rubbing direction.

Accordingly, the Examiner is respectfully requested to reconsider and withdraw the rejection.

II. Paragraph 3 - Examiner's Response to Arguments (Double Patent Rejection)

The Examiner has maintained the rejection of Claims 1 and 12-14 as allegedly being unpatentable over claims 1-9 of U.S. 6,965,473 B2 (hereinafter referred to as "Hayashi et al.") on the grounds of non-statutory obviousness-type double patenting.

Applicants' Response:

Applicants defer response and request that the Examiner hold the rejection in abeyance until allowable subject matter is determined.

III. Paragraph 5 - Obviousness Type Double Patenting Rejection

Claims 1 and 12-14 are rejected as allegedly being unpatentable over claims 1-9 of Hayashi et al. on the grounds of non-statutory obviousness-type double patenting.

Applicants' Response:

As discussed above, Applicants defer response and request that the Examiner hold the rejection in abeyance until allowable subject matter is determined.

IV. Paragraph 7 - Claim Rejections Under 35 U.S.C. § 102(b)

The Examiner has rejected Claims 1-3, 5 and 12-14 under 35 U.S.C. § 102(b) as allegedly being anticipated by Andreatta.

Applicants' Response:

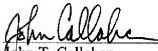
The Examiner has reiterated the previous argument set forth in the Action dated March 22, 2006. To avoid redundancy, Applicants refer to the above comments in Paragraph (I).

V. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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Date: August 31, 2007